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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,744	10/06/2003	Matthew R. Smith	DP-310128	2797

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EXAMINER

ARTHUR JEANGLAUDE, GERTRUDE

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,744

Applicant(s)

SMITH ET AL.

Examiner

Gertrude Arthur-Jeanglaude

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-20 is/are allowed.
- 6) ☒ Claim(s) 1 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 7 is objected to because of the following informalities: Apparently the word "steps" should be - - step- - since it is further defining one step. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 7, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimazaki et al. (U.S. Patent No. 6,611,744).

As to claim 1, Shimazaki et al. disclose a method for combining a back-up aid function with park assist function in a motor vehicle, comprising the steps of: determining a distance from a motor vehicle to an object (See col. 17, lines 6-15); determining a velocity of the motor vehicle (See col. 18, lines 15-27). Shimazaki et al. disclose the step of subtracting a scaled version of the velocity and providing a driver stimulus but not specifically as a function of a first multiplicand (See col. 23, lines 60-67) (See col. 18, lines 15-27, 47-58). However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shimazaki et al. by subtracting a scaled version of the velocity and a minimum distance threshold

from the distance to provide a first multiplicand and providing a driver stimulus as a function of the first multiplicand in order to assist the driver.

As to claim 4, Shimazaki et al. disclose as shown in Fig. 10 the driver stimulus is an auditory stimulus.

As to claim 7, Shimazaki et al. disclose the step of multiplying the first multiplicand by a proportionality constant (See col. 3, lines 56-59).

Claims 5-6, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimazaki et al. (U.S. Patent No. 6,611,744) in view of Shimizu et al. (U.S. Patent No. 6,483,442).

As to claims 5-6, Shimazaki et al. disclose a wheel angle sensor but does not specifically disclose a wheel speed sensor. In an analogous art, Shimizu et al. disclose a wheel speed sensor and radar sensor in the parking aid system (See col. 1, lines 22-29; col. 16, lines 50-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Shimazaki et al. with that of Shimizu et al. by having a wheel speed sensor and radar sensor in order to assist the driver with the parking aid system.

Allowable Subject Matter

Claims 8-20 are allowed.

The prior art fails to disclose an automotive system including a back-up aid with parking assist, the system comprising a memory subsystem coupled to the processor, the memory subsystem storing code that when executed by the processor causes the

processor to perform the steps of: determining a distance from a motor vehicle to an object based upon output provided by the sensor; determining a velocity of the motor vehicle; subtracting a scaled version of the velocity and a minimum distance threshold from the distance to provide a first multiplicand; and providing a driver stimulus as a function of the first multiplicand.

Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In claims 2-3, the prior art fails to disclose the scaled version of the velocity is the product of a time to collision threshold multiplied by the velocity nor does it disclose the scaled version of the velocity is the product of an estimated driver reaction time multiplied by the velocity.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shimazaki et al. (US 2002/0104700) disclose a parking aiding device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (703) 308-7564. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

Art Unit: 3661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ



August 30, 2004


GERTRUDE A. JEANGLAUE
PRIMARY EXAMINER